DESIGN & DELIVERY
of
Tactical Decision Games
Sand Table Exercises

Objectives

- **Identify the differences between Analytical Decision Making and Intuitive Decision Making**

- **Describe basic design and delivery requirements for Tactical Decision Games (TDGS)**

- **Demonstrate how Sand Table Exercises (STEX) can be used to deliver TDGS**

Part I

How We Decide

Observations on Decision Making

Observation #1

Decision making skills are developed through practice

Observations on Decision Making

Observation #2

The lower the echelon of command the simpler, faster, more direct and accelerated the decision process

Observations on Decision Making

Observation #3

The ability to rapidly develop solutions to new problems is based on pattern recognition

The Decision Making Process

- **Intuitive Decision Making (reactive)**

  Pattern recognition based on previous experience

- **Analytical Decision Making (planned)**

  Calculated selection of alternatives

Intuitive Decison Making

- **Rely on experience to recognize the essence of a given situation or problem**

- **Utilize pattern recognition from previous actions, observations, and training to develop the solution**
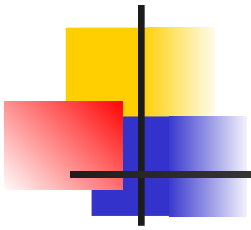
Intuitive Decison Making

- **Best way to improve decision making is to improve pattern recognition, the best way to improve pattern recognition is to improve. . .**
 **Situation Awareness**

Intuitive Decision Making In the Fire Environment

- **Rarely is there only "one right" answer**

- **"A good plan executed now is better than the perfect plan executed too late"**

Analytical Decision Making

- **Identify possible options**

- **Analyze all options according to a set criteria**

- **Calculate a value for all criteria of each option**

- **Choose the option with highest total criteria values**
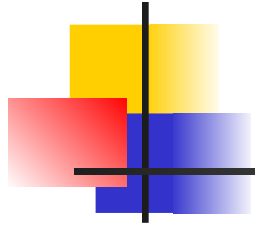
Analytical Decision Making

In Theory . . . . .

The highest value option will provide the most optimal solution

Analytical Decision Making In the Fire Environment

In Reality . . . . .

- The environment is constantly changing and information can quickly become outdated

- Lack of time can hamper the ability to conduct an accurate analysis

Decision Making Summary

- **Both analytical and intuitive decision making are used on the fireground**

- **Firefighters at the tactical level rely primarily on intuitive decision making**

- **Decision making skills can be improved with practice**
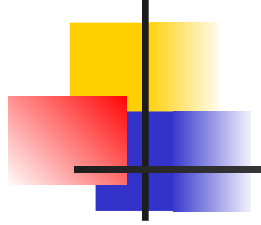
So why spend time playing games when there is work to do . . .

Why do TDGS / STEX ?

TDGS and STEX provide a simple, adaptable, and repeatable method of challenging a firefighter to make decisions in situations they will face on the fireground

Intent of TDGS/STEX

- **Practice making decisions in an operational context**

- **Practice communicating those decisions in the form of briefings or instructions**

- **Sit in the "hot seat" and build pattern recognitions skills**

What is a Tactical Decision Game

- **Facilitator provides information or a briefing describing a scenario**

- **Student plays the role of a leader in a dilemma that requires a decision**

- **Requires interactive two-way communication between role players**

What is a Sand Table Exercise

- **Utilizes a 3-D terrain model to help visually develop and present a TDGS**
- **Ideally suited for group exercises**
- **Low tech simulation method**

What is a Simulation

- Suspend disbelief
- Induce stress
- Create dilemmas
- Observe behaviors

Part II

Designing TDGS

How TDGS Work

- **Put participants in role-play situations**

- **Provide limited information**

- **Apply time constraints**

- **Face a dilemma**

- **Conduct an After Action Review (AAR)**

Rules of TDGS

- **Enforce a time limit so players feel some of the stress that would be present in a real fireground situation**

- **Require decisions be communicated in the the form of real time instructions**

- **There are no "School Solutions"**

Develop a Training Objective

- **Takes place prior to designing a TDGS**

- **Facilitator identifies the goal of the TDGS**

  It can be a very specific objective: "Practice standard report on conditions procedure with dispatch"

Guidelines For Designing TDGS

- **Start with a problem, not a solution**

- **Start general, then get specific**
- **Create uncertainty**
- **Create time pressure**

- **Create competing priorities**
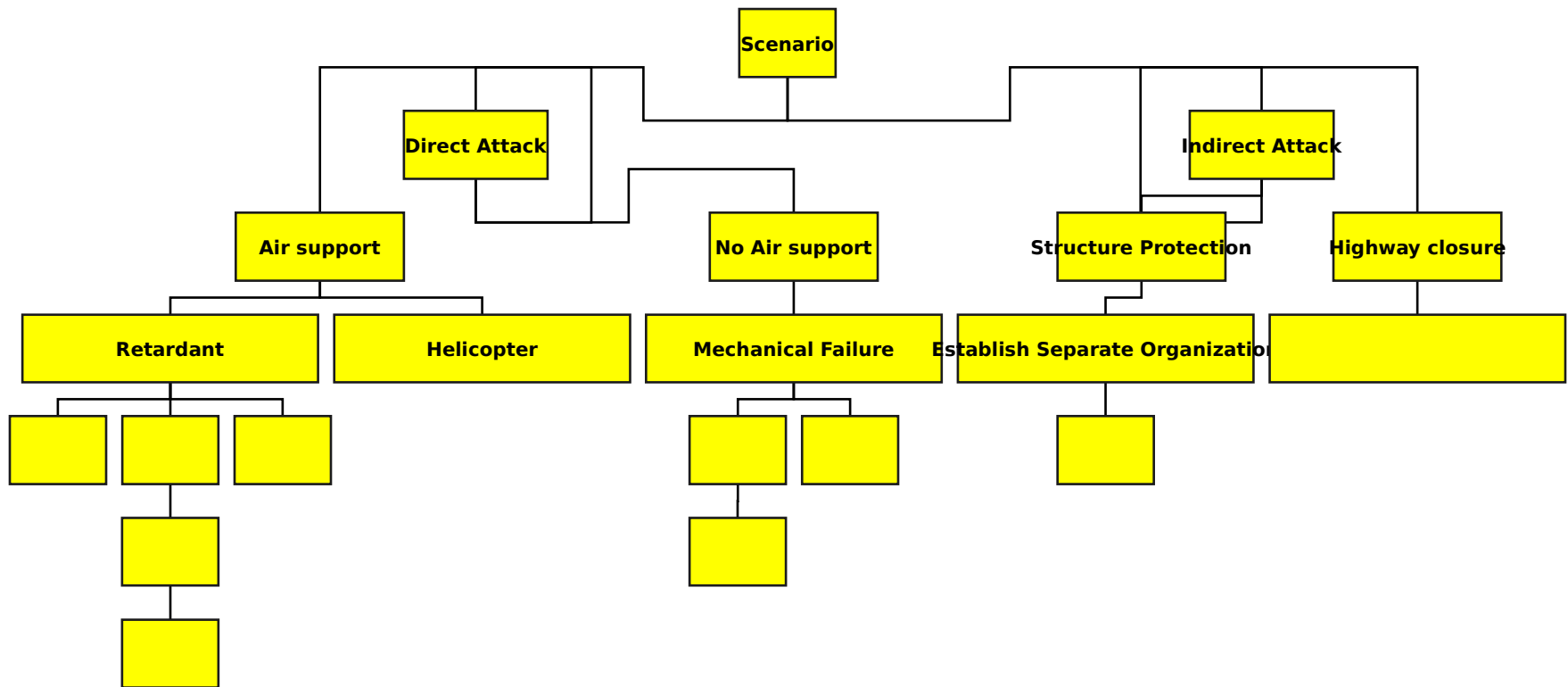- **Create interaction between resources or subordinates**
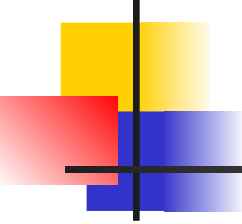
Guidelines For Designing TDGS

- **Build to a single dilemma that requires an immediate decision**

OR

- **Identify multiple decision points and script a dynamic simulation   (Decision Tree)**

The Decision Tree

```
                            Scenario

        Direct Attack                            Indirect Attack

   Air support      No Air support    Structure Protection    Highway closure

Retardant   Helicopter   Mechanical Failure   Establish Separate Organization
```

Part III

Delivering TDGS using Sandtables

How We Learn

"Tell me and I will forget, Show me and I may remember, but involve me and I will understand"

– Chinese proverb

TDGS/STEX Facilitor Characteristics

- Enthusiastic

- Tactically knowledgeable

- Thinks quickly on feet

- Keeps it moving

- Able to summarize lessons

- Critiques without being critical

- Involves all players

TDGS/STEX Environment

- **Respectful - identify good ideas**
- **Confrontational - keep the pressure on**

Try to achieve a balance!

TDGS/STEX Facilitation

- Brief group with all players assuming they are the designated leader

- Provide a short time for players to develop their decision and instructions

- Select a player to issue instructions verbally as they would on the fireground

TDGS/STEX Facilitation

- Paint a good picture of the environment in the briefing

- Control the tempo with time tags and piece movement

- Murphy invented TDGS...insert uncertainty and adversity into the game with pre-planned inputs

TDGS/STEX Facilitation

- **Always AAR…focus on decision making**

- **As the facilitator, you should not be doing most of the talking**

- **Ask the players to think aloud – describe situational awareness, how decision was made, etc**

- **Avoid leading questions, ask open-ended questions**

Open-Ended Questions

- **General form: Asking about <u>X</u>, where <u>X</u> is a specific subject and where there is more than one "right way" to answer.**

- **Examples: <u>HOW</u> would you have handled the situation?**

- **<u>WHY</u> is it important to _____?**

- **<u>WHY NOT</u> just simplify things and only _____?**

- **<u>WHAT</u> are some experiences you've had in the past that are similar to this situation?**

TDGS/STEX Summary

- **Concentrate on decision making, <u>NOT</u> on tactics**
- **Stick with the training objectives**
- **Emphasize effective communication**
- **Utilize standard local unit identifiers**
- **Utilize IPRG, SOPs, and other job aids**
- **Create a level of positive stress**
- **Conduct an After Action Review**

Adaptable Tool

- **Briefing**

- **After Action Review**

- **Planning**

- **Training (TDGS, Topo Interp, etc)**

- **Full scale simulations**